

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-115490-1

Client Project/Site: Gold King Mine - Region 8

For:

Weston Solutions, Inc.

1435 Garrison Street

Suite 100

Lakewood, Colorado 80215

Attn: Moira Pryhoda



Authorized for release by:

8/13/2015 5:44:14 PM

Sheila Hoffman, Project Manager II

(912)354-7858 e.3004

sheila.hoffman@testamericainc.com

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

## Method Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SAV
200.8	Metals (ICP/MS)	EPA	TAL SAV
2340B-2011	Total Hardness (as CaCO3) by calculation	SM	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV

### Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

## Sample Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-115490-1	GKMTW41_081115	Water	08/11/15 09:40	08/12/15 09:46
680-115490-2	GKMTW42_081115	Water	08/11/15 10:45	08/12/15 09:46
680-115490-3	GKMTW43_081115	Water	08/11/15 11:35	08/12/15 09:46
680-115490-4	GKMTW44_081115	Water	08/11/15 12:30	08/12/15 09:46
680-115490-5	GKMTW45_081115	Water	08/11/15 12:40	08/12/15 09:46
680-115490-6	GKMTW100_081115	Water	08/11/15 09:15	08/12/15 09:46
680-115490-7	GKMTW101_081115	Water	08/11/15 09:55	08/12/15 09:46
680-115490-8	GKMTW102_081115	Water	08/11/15 11:05	08/12/15 09:46

TestAmerica Savannah

# Definitions/Glossary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
L	A negative instrument reading had an absolute value greater than the reporting limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Savannah

# Case Narrative

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Job ID: 680-115490-1**

**Laboratory: TestAmerica Savannah**

**Narrative**

## CASE NARRATIVE

**Client: Weston Solutions, Inc.**

**Project: Gold King Mine - Region 8**

**Report Number: 680-115490-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### RECEIPT

The samples were received on 08/12/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

### TOTAL METALS (ICP)

Samples GKMTW41\_081115 (680-115490-1), GKMTW42\_081115 (680-115490-2), GKMTW43\_081115 (680-115490-3), GKMTW44\_081115 (680-115490-4), GKMTW45\_081115 (680-115490-5), GKMTW100\_081115 (680-115490-6), GKMTW101\_081115 (680-115490-7) and GKMTW102\_081115 (680-115490-8) were analyzed for total metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 08/12/2015 and analyzed on 08/13/2015.

Sodium failed the recovery criteria low for the MS of sample GKMTW42\_081115MS (680-115490-2) in batch 680-395943.

Sodium failed the recovery criteria low for the MSD of sample GKMTW42\_081115MSD (680-115490-2) in batch 680-395943.

Refer to the QC report for details.

Samples GKMTW42\_081115 (680-115490-2)[10X], GKMTW43\_081115 (680-115490-3)[10X], GKMTW44\_081115 (680-115490-4)[10X], GKMTW100\_081115 (680-115490-6)[10X] and GKMTW101\_081115 (680-115490-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL METALS (ICPMS)

Samples GKMTW41\_081115 (680-115490-1), GKMTW42\_081115 (680-115490-2), GKMTW43\_081115 (680-115490-3), GKMTW44\_081115 (680-115490-4), GKMTW45\_081115 (680-115490-5), GKMTW100\_081115 (680-115490-6), GKMTW101\_081115 (680-115490-7) and GKMTW102\_081115 (680-115490-8) were analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 08/12/2015 and analyzed on 08/13/2015.

Selenium was detected in method blank MB 680-395745/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Selenium was detected in method blank MB 680-395749/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Selenium was detected in method blank MB 680-395798/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

TestAmerica Savannah

## Case Narrative

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

---

### Job ID: 680-115490-1 (Continued)

---

#### Laboratory: TestAmerica Savannah (Continued)

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL MERCURY**

Samples GKMTW41\_081115 (680-115490-1), GKMTW42\_081115 (680-115490-2), GKMTW43\_081115 (680-115490-3), GKMTW44\_081115 (680-115490-4), GKMTW45\_081115 (680-115490-5), GKMTW100\_081115 (680-115490-6), GKMTW101\_081115 (680-115490-7) and GKMTW102\_081115 (680-115490-8) were analyzed for total mercury in accordance with EPA Method 245.1. The samples were prepared on 08/12/2015 and analyzed on 08/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **TOTAL HARDNESS (AS CaCO<sub>3</sub>) BY CALCULATION**

Samples GKMTW41\_081115 (680-115490-1), GKMTW42\_081115 (680-115490-2), GKMTW43\_081115 (680-115490-3), GKMTW44\_081115 (680-115490-4), GKMTW45\_081115 (680-115490-5), GKMTW100\_081115 (680-115490-6), GKMTW101\_081115 (680-115490-7) and GKMTW102\_081115 (680-115490-8) were analyzed for total hardness (as CaCO<sub>3</sub>) by calculation in accordance with SM 2340B. The samples were analyzed on 08/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW41\_081115

Lab Sample ID: 680-115490-1

Date Collected: 08/11/15 09:40

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:12	08/13/15 09:31	1
Calcium	200000		500	25	ug/L		08/12/15 15:12	08/13/15 09:31	1
Iron	17	U	50	17	ug/L		08/12/15 15:12	08/13/15 09:31	1
Magnesium	29000		500	33	ug/L		08/12/15 15:12	08/13/15 09:31	1
Potassium	1900		1000	17	ug/L		08/12/15 15:12	08/13/15 09:31	1
Sodium	9900		1000	480	ug/L		08/12/15 15:12	08/13/15 09:31	1

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 12:38	1
Arsenic	0.37	U L	1.0	0.37	ug/L		08/12/15 15:12	08/13/15 12:38	1
Barium	16		2.0	0.14	ug/L		08/12/15 15:12	08/13/15 12:38	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 12:38	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:12	08/13/15 12:38	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 12:38	1
Cobalt	0.24	J	0.40	0.12	ug/L		08/12/15 15:12	08/13/15 12:38	1
Copper	22		1.0	0.50	ug/L		08/12/15 15:12	08/13/15 12:38	1
Lead	0.060	U	0.30	0.060	ug/L		08/12/15 15:12	08/13/15 12:38	1
Manganese	1.2	U	2.5	1.2	ug/L		08/12/15 15:12	08/13/15 12:38	1
Nickel	3.5		1.0	0.40	ug/L		08/12/15 15:12	08/13/15 12:38	1
Selenium	2.0	B	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 12:38	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 12:38	1
Thallium	0.10	U ^	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 12:38	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:12	08/13/15 12:38	1
Zinc	5.5	J	20	2.8	ug/L		08/12/15 15:12	08/13/15 12:38	1
Molybdenum	2.3		1.0	0.45	ug/L		08/12/15 15:12	08/13/15 12:38	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	620		3.3	3.3	mg/L			08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:19	1

Client Sample ID: GKMTW42\_081115

Lab Sample ID: 680-115490-2

Date Collected: 08/11/15 10:45

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	140	J	200	24	ug/L		08/12/15 15:12	08/13/15 08:46	1
Calcium	4000		500	25	ug/L		08/12/15 15:12	08/13/15 08:46	1
Iron	66		50	17	ug/L		08/12/15 15:12	08/13/15 08:46	1
Magnesium	110	J	500	33	ug/L		08/12/15 15:12	08/13/15 08:46	1
Potassium	1700		1000	17	ug/L		08/12/15 15:12	08/13/15 08:46	1
Sodium	120000		10000	4800	ug/L		08/12/15 15:12	08/13/15 11:06	10

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW42\_081115

Lab Sample ID: 680-115490-2

Date Collected: 08/11/15 10:45

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 10:58	1
Arsenic	8.5		1.0	0.37	ug/L		08/12/15 15:12	08/13/15 10:58	1
Barium	35		2.0	0.14	ug/L		08/12/15 15:12	08/13/15 10:58	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 10:58	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:12	08/13/15 10:58	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 10:58	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:12	08/13/15 10:58	1
Copper	6.8		1.0	0.50	ug/L		08/12/15 15:12	08/13/15 10:58	1
Lead	0.22	J	0.30	0.060	ug/L		08/12/15 15:12	08/13/15 10:58	1
Manganese	1.8	J	2.5	1.2	ug/L		08/12/15 15:12	08/13/15 10:58	1
Nickel	0.43	J	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 10:58	1
Selenium	1.0	J B	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 10:58	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 10:58	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 10:58	1
Vanadium	8.1		1.0	0.30	ug/L		08/12/15 15:12	08/13/15 10:58	1
Zinc	3.0	J	20	2.8	ug/L		08/12/15 15:12	08/13/15 10:58	1
Molybdenum	19		1.0	0.45	ug/L		08/12/15 15:12	08/13/15 10:58	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	11		3.3	3.3	mg/L			08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:00	1

Client Sample ID: GKMTW43\_081115

Lab Sample ID: 680-115490-3

Date Collected: 08/11/15 11:35

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:04	08/13/15 05:50	1
Calcium	13000		500	25	ug/L		08/12/15 15:04	08/13/15 05:50	1
Iron	17	U	50	17	ug/L		08/12/15 15:04	08/13/15 05:50	1
Magnesium	130	J	500	33	ug/L		08/12/15 15:04	08/13/15 05:50	1
Potassium	640	J	1000	17	ug/L		08/12/15 15:04	08/13/15 05:50	1
Sodium	230000		10000	4800	ug/L		08/12/15 15:04	08/13/15 10:43	10

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 02:29	1
Arsenic	0.87	J	1.0	0.37	ug/L		08/12/15 15:04	08/13/15 02:29	1
Barium	32		2.0	0.14	ug/L		08/12/15 15:04	08/13/15 02:29	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:04	08/13/15 02:29	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:04	08/13/15 02:29	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:04	08/13/15 02:29	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:04	08/13/15 02:29	1
Copper	5.1		1.0	0.50	ug/L		08/12/15 15:04	08/13/15 02:29	1
Lead	0.14	J	0.30	0.060	ug/L		08/12/15 15:04	08/13/15 02:29	1

TestAmerica Savannah



# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW43\_081115

Lab Sample ID: 680-115490-3

Date Collected: 08/11/15 11:35

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	19		2.5	1.2	ug/L		08/12/15 15:04	08/13/15 02:29	1
Nickel	0.40	U	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 02:29	1
Selenium	1.3	J B	2.0	0.58	ug/L		08/12/15 15:04	08/13/15 02:29	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:04	08/13/15 02:29	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:04	08/13/15 02:29	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:04	08/13/15 02:29	1
Zinc	2.8	U	20	2.8	ug/L		08/12/15 15:04	08/13/15 02:29	1
Molybdenum	2.3		1.0	0.45	ug/L		08/12/15 15:04	08/13/15 02:29	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	33		3.3	3.3	mg/L			08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:16	08/13/15 13:00	1

Client Sample ID: GKMTW44\_081115

Lab Sample ID: 680-115490-4

Date Collected: 08/11/15 12:30

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:12	08/13/15 09:22	1
Calcium	5200		500	25	ug/L		08/12/15 15:12	08/13/15 09:22	1
Iron	17	U	50	17	ug/L		08/12/15 15:12	08/13/15 09:22	1
Magnesium	290	J	500	33	ug/L		08/12/15 15:12	08/13/15 09:22	1
Potassium	350	J	1000	17	ug/L		08/12/15 15:12	08/13/15 09:22	1
Sodium	140000		10000	4800	ug/L		08/12/15 15:12	08/13/15 11:29	10

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 11:29	1
Arsenic	3.4		1.0	0.37	ug/L		08/12/15 15:12	08/13/15 11:29	1
Barium	45		2.0	0.14	ug/L		08/12/15 15:12	08/13/15 11:29	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 11:29	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:12	08/13/15 11:29	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 11:29	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:12	08/13/15 11:29	1
Copper	4.4		1.0	0.50	ug/L		08/12/15 15:12	08/13/15 11:29	1
Lead	0.060	U	0.30	0.060	ug/L		08/12/15 15:12	08/13/15 11:29	1
Manganese	5.5		2.5	1.2	ug/L		08/12/15 15:12	08/13/15 11:29	1
Nickel	0.41	J	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 11:29	1
Selenium	1.2	J B	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 11:29	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 11:29	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 11:29	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:12	08/13/15 11:29	1
Zinc	2.8	U	20	2.8	ug/L		08/12/15 15:12	08/13/15 11:29	1
Molybdenum	4.1		1.0	0.45	ug/L		08/12/15 15:12	08/13/15 11:29	1

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Client Sample ID: GKMTW44\_081115**

**Lab Sample ID: 680-115490-4**

Date Collected: 08/11/15 12:30

Matrix: Water

Date Received: 08/12/15 09:46

**Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	14		3.3	3.3	mg/L			08/13/15 12:18	1

**Method: 245.1 - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:13	1

**Client Sample ID: GKMTW45\_081115**

**Lab Sample ID: 680-115490-5**

Date Collected: 08/11/15 12:40

Matrix: Water

Date Received: 08/12/15 09:46

**Method: 200.7 Rev 4.4 - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:04	08/13/15 05:55	1
Calcium	77000		500	25	ug/L		08/12/15 15:04	08/13/15 05:55	1
Iron	17	U	50	17	ug/L		08/12/15 15:04	08/13/15 05:55	1
Magnesium	48000		500	33	ug/L		08/12/15 15:04	08/13/15 05:55	1
Potassium	2300		1000	17	ug/L		08/12/15 15:04	08/13/15 05:55	1
Sodium	26000		1000	480	ug/L		08/12/15 15:04	08/13/15 05:55	1

**Method: 200.8 - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 02:32	1
Arsenic	0.37	U	1.0	0.37	ug/L		08/12/15 15:04	08/13/15 02:32	1
Barium	100		2.0	0.14	ug/L		08/12/15 15:04	08/13/15 02:32	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:04	08/13/15 02:32	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:04	08/13/15 02:32	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:04	08/13/15 02:32	1
Cobalt	0.12	J	0.40	0.12	ug/L		08/12/15 15:04	08/13/15 02:32	1
Copper	1.6		1.0	0.50	ug/L		08/12/15 15:04	08/13/15 02:32	1
Lead	0.082	J	0.30	0.060	ug/L		08/12/15 15:04	08/13/15 02:32	1
Manganese	3.7		2.5	1.2	ug/L		08/12/15 15:04	08/13/15 02:32	1
Nickel	0.89	J	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 02:32	1
Selenium	1.2	J B	2.0	0.58	ug/L		08/12/15 15:04	08/13/15 02:32	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:04	08/13/15 02:32	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:04	08/13/15 02:32	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:04	08/13/15 02:32	1
Zinc	4.6	J	20	2.8	ug/L		08/12/15 15:04	08/13/15 02:32	1
Molybdenum	1.7		1.0	0.45	ug/L		08/12/15 15:04	08/13/15 02:32	1

**Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	390		3.3	3.3	mg/L			08/13/15 12:18	1

**Method: 245.1 - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:16	08/13/15 13:03	1

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW100\_081115

Lab Sample ID: 680-115490-6

Date Collected: 08/11/15 09:15

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	34	J	200	24	ug/L		08/12/15 17:44	08/13/15 08:28	1
Calcium	9100		500	25	ug/L		08/12/15 17:44	08/13/15 08:28	1
Iron	27	J	50	17	ug/L		08/12/15 17:44	08/13/15 08:28	1
Magnesium	140	J	500	33	ug/L		08/12/15 17:44	08/13/15 08:28	1
Potassium	680	J	1000	17	ug/L		08/12/15 17:44	08/13/15 08:28	1
Sodium	160000		10000	4800	ug/L		08/12/15 17:44	08/13/15 10:54	10

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 17:45	08/13/15 10:09	1
Arsenic	37		1.0	0.37	ug/L		08/12/15 17:45	08/13/15 10:09	1
Barium	30		2.0	0.14	ug/L		08/12/15 17:45	08/13/15 10:09	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 17:45	08/13/15 10:09	1
Cadmium	0.043	U L	0.10	0.043	ug/L		08/12/15 17:45	08/13/15 10:09	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 17:45	08/13/15 10:09	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 17:45	08/13/15 10:09	1
Copper	13		1.0	0.50	ug/L		08/12/15 17:45	08/13/15 10:09	1
Lead	0.30		0.30	0.060	ug/L		08/12/15 17:45	08/13/15 10:09	1
Manganese	3.5		2.5	1.2	ug/L		08/12/15 17:45	08/13/15 10:09	1
Nickel	0.61	J	1.0	0.40	ug/L		08/12/15 17:45	08/13/15 10:09	1
Selenium	4.8	B	2.0	0.58	ug/L		08/12/15 17:45	08/13/15 10:09	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 17:45	08/13/15 10:09	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 17:45	08/13/15 10:09	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 17:45	08/13/15 10:09	1
Zinc	7.2	J	20	2.8	ug/L		08/12/15 17:45	08/13/15 10:09	1
Molybdenum	78		1.0	0.45	ug/L		08/12/15 17:45	08/13/15 10:09	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	23		3.3	3.3	mg/L			08/13/15 12:13	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:41	1

Client Sample ID: GKMTW101\_081115

Lab Sample ID: 680-115490-7

Date Collected: 08/11/15 09:55

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	120	J	200	24	ug/L		08/12/15 15:12	08/13/15 09:00	1
Calcium	61000		500	25	ug/L		08/12/15 15:12	08/13/15 09:00	1
Iron	17	U	50	17	ug/L		08/12/15 15:12	08/13/15 09:00	1
Magnesium	8900		500	33	ug/L		08/12/15 15:12	08/13/15 09:00	1
Potassium	2200		1000	17	ug/L		08/12/15 15:12	08/13/15 09:00	1
Sodium	150000		10000	4800	ug/L		08/12/15 15:12	08/13/15 11:18	10

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 11:25	1

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW101\_081115

Lab Sample ID: 680-115490-7

Date Collected: 08/11/15 09:55

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.62	J	1.0	0.37	ug/L		08/12/15 15:12	08/13/15 11:25	1
Barium	39		2.0	0.14	ug/L		08/12/15 15:12	08/13/15 11:25	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 11:25	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:12	08/13/15 11:25	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 11:25	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:12	08/13/15 11:25	1
Copper	22		1.0	0.50	ug/L		08/12/15 15:12	08/13/15 11:25	1
Lead	1.8		0.30	0.060	ug/L		08/12/15 15:12	08/13/15 11:25	1
Manganese	1.4	J	2.5	1.2	ug/L		08/12/15 15:12	08/13/15 11:25	1
Nickel	16		1.0	0.40	ug/L		08/12/15 15:12	08/13/15 11:25	1
Selenium	19	B	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 11:25	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 11:25	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 11:25	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:12	08/13/15 11:25	1
Zinc	14	J	20	2.8	ug/L		08/12/15 15:12	08/13/15 11:25	1
Molybdenum	11		1.0	0.45	ug/L		08/12/15 15:12	08/13/15 11:25	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	190		3.3	3.3	mg/L			08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:03	1

Client Sample ID: GKMTW102\_081115

Lab Sample ID: 680-115490-8

Date Collected: 08/11/15 11:05

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2500		200	24	ug/L		08/12/15 15:12	08/13/15 09:27	1
Calcium	41000		500	25	ug/L		08/12/15 15:12	08/13/15 09:27	1
Iron	1800		50	17	ug/L		08/12/15 15:12	08/13/15 09:27	1
Magnesium	4600		500	33	ug/L		08/12/15 15:12	08/13/15 09:27	1
Potassium	2200		1000	17	ug/L		08/12/15 15:12	08/13/15 09:27	1
Sodium	52000		1000	480	ug/L		08/12/15 15:12	08/13/15 09:27	1

## Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 12:33	1
Arsenic	0.37	U	1.0	0.37	ug/L		08/12/15 15:12	08/13/15 12:33	1
Barium	72		2.0	0.14	ug/L		08/12/15 15:12	08/13/15 12:33	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 12:33	1
Cadmium	0.11		0.10	0.043	ug/L		08/12/15 15:12	08/13/15 12:33	1
Chromium	1.9	J	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 12:33	1
Cobalt	0.69		0.40	0.12	ug/L		08/12/15 15:12	08/13/15 12:33	1
Copper	28		1.0	0.50	ug/L		08/12/15 15:12	08/13/15 12:33	1
Lead	20		0.30	0.060	ug/L		08/12/15 15:12	08/13/15 12:33	1
Manganese	76		2.5	1.2	ug/L		08/12/15 15:12	08/13/15 12:33	1

TestAmerica Savannah

# Client Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

Client Sample ID: GKMTW102\_081115

Lab Sample ID: 680-115490-8

Date Collected: 08/11/15 11:05

Matrix: Water

Date Received: 08/12/15 09:46

## Method: 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	2.3		1.0	0.40	ug/L		08/12/15 15:12	08/13/15 12:33	1
Selenium	2.2	B	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 12:33	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 12:33	1
Thallium	0.10	U ^	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 12:33	1
Vanadium	3.4		1.0	0.30	ug/L		08/12/15 15:12	08/13/15 12:33	1
Zinc	250		20	2.8	ug/L		08/12/15 15:12	08/13/15 12:33	1
Molybdenum	0.91	J	1.0	0.45	ug/L		08/12/15 15:12	08/13/15 12:33	1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	120		3.3	3.3	mg/L			08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L		08/12/15 18:23	08/13/15 09:16	1

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 680-395747/1-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 395747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:04	08/13/15 03:22	1
Calcium	25	U	500	25	ug/L		08/12/15 15:04	08/13/15 03:22	1
Iron	17	U	50	17	ug/L		08/12/15 15:04	08/13/15 03:22	1
Magnesium	33	U	500	33	ug/L		08/12/15 15:04	08/13/15 03:22	1
Potassium	17	U	1000	17	ug/L		08/12/15 15:04	08/13/15 03:22	1
Sodium	480	U	1000	480	ug/L		08/12/15 15:04	08/13/15 03:22	1

Lab Sample ID: LCS 680-395747/2-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 395747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	1980		ug/L		99	85 - 115
Calcium	2000	2070		ug/L		103	85 - 115
Iron	2000	2020		ug/L		101	85 - 115
Magnesium	2000	2030		ug/L		102	85 - 115
Potassium	2000	2140		ug/L		107	85 - 115
Sodium	2000	1860		ug/L		93	85 - 115

Lab Sample ID: MB 680-395752/1-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 395752

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 15:12	08/13/15 08:32	1
Calcium	25	U	500	25	ug/L		08/12/15 15:12	08/13/15 08:32	1
Iron	17	U	50	17	ug/L		08/12/15 15:12	08/13/15 08:32	1
Magnesium	33	U	500	33	ug/L		08/12/15 15:12	08/13/15 08:32	1
Potassium	17	U	1000	17	ug/L		08/12/15 15:12	08/13/15 08:32	1
Sodium	480	U	1000	480	ug/L		08/12/15 15:12	08/13/15 08:32	1

Lab Sample ID: LCS 680-395752/2-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	2040		ug/L		102	85 - 115
Calcium	2000	2150		ug/L		107	85 - 115
Iron	2000	2080		ug/L		104	85 - 115
Magnesium	2000	2080		ug/L		104	85 - 115
Potassium	2000	2170		ug/L		109	85 - 115
Sodium	2000	1950		ug/L		97	85 - 115

Lab Sample ID: 680-115490-2 MS

Matrix: Water

Analysis Batch: 395943

Client Sample ID: GKMTW42\_081115

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aluminum	140	J	2000	2230		ug/L		104	75 - 125

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 680-115490-2 MS

Matrix: Water

Analysis Batch: 395943

Client Sample ID: GKMTW42\_081115

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	4000		2000	6160		ug/L		106	75 - 125
Iron	66		2000	2140		ug/L		104	75 - 125
Magnesium	110	J	2000	2190		ug/L		104	75 - 125
Potassium	1700		2000	4130		ug/L		122	75 - 125

Lab Sample ID: 680-115490-2 MS

Matrix: Water

Analysis Batch: 395943

Client Sample ID: GKMTW42\_081115

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sodium	120000		2000	122000	4	ug/L		-50	75 - 125

Lab Sample ID: 680-115490-2 MSD

Matrix: Water

Analysis Batch: 395943

Client Sample ID: GKMTW42\_081115

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	140	J	2000	2200		ug/L		103	75 - 125	1	20
Calcium	4000		2000	6090		ug/L		102	75 - 125	1	20
Iron	66		2000	2110		ug/L		102	75 - 125	1	20
Magnesium	110	J	2000	2150		ug/L		102	75 - 125	2	20
Potassium	1700		2000	4080		ug/L		120	75 - 125	1	20

Lab Sample ID: 680-115490-2 MSD

Matrix: Water

Analysis Batch: 395943

Client Sample ID: GKMTW42\_081115

Prep Type: Total/NA

Prep Batch: 395752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sodium	120000		2000	120000	4	ug/L		-148	75 - 125	2	20

Lab Sample ID: MB 680-395800/1-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 395800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24	U	200	24	ug/L		08/12/15 17:28	08/13/15 05:59	1
Calcium	25	U	500	25	ug/L		08/12/15 17:28	08/13/15 05:59	1
Iron	17	U	50	17	ug/L		08/12/15 17:28	08/13/15 05:59	1
Magnesium	33	U	500	33	ug/L		08/12/15 17:28	08/13/15 05:59	1
Potassium	17	U	1000	17	ug/L		08/12/15 17:28	08/13/15 05:59	1
Sodium	480	U	1000	480	ug/L		08/12/15 17:28	08/13/15 05:59	1

Lab Sample ID: LCS 680-395800/2-A

Matrix: Water

Analysis Batch: 395943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 395800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	2000	2040		ug/L		102	85 - 115
Calcium	2000	2120		ug/L		106	85 - 115

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-395800/2-A  
Matrix: Water  
Analysis Batch: 395943

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395800  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	2000	2090		ug/L		104	85 - 115
Magnesium	2000	2100		ug/L		105	85 - 115
Potassium	2000	2210		ug/L		111	85 - 115
Sodium	2000	2010		ug/L		100	85 - 115

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-395745/1-A  
Matrix: Water  
Analysis Batch: 395956

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 395745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 00:23	1
Arsenic	0.37	U	1.0	0.37	ug/L		08/12/15 15:04	08/13/15 00:23	1
Barium	0.14	U	2.0	0.14	ug/L		08/12/15 15:04	08/13/15 00:23	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:04	08/13/15 00:23	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:04	08/13/15 00:23	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:04	08/13/15 00:23	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:04	08/13/15 00:23	1
Copper	0.50	U	1.0	0.50	ug/L		08/12/15 15:04	08/13/15 00:23	1
Lead	0.060	U	0.30	0.060	ug/L		08/12/15 15:04	08/13/15 00:23	1
Manganese	1.2	U	2.5	1.2	ug/L		08/12/15 15:04	08/13/15 00:23	1
Nickel	0.40	U	1.0	0.40	ug/L		08/12/15 15:04	08/13/15 00:23	1
Selenium	0.915	J	2.0	0.58	ug/L		08/12/15 15:04	08/13/15 00:23	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:04	08/13/15 00:23	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:04	08/13/15 00:23	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:04	08/13/15 00:23	1
Zinc	2.8	U	20	2.8	ug/L		08/12/15 15:04	08/13/15 00:23	1
Molybdenum	0.45	U	1.0	0.45	ug/L		08/12/15 15:04	08/13/15 00:23	1

Lab Sample ID: LCS 680-395745/2-A  
Matrix: Water  
Analysis Batch: 395956

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395745  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	20.0	21.8		ug/L		109	85 - 115
Arsenic	40.0	40.4		ug/L		101	85 - 115
Barium	40.0	39.8		ug/L		99	85 - 115
Beryllium	20.0	20.8		ug/L		104	85 - 115
Cadmium	20.0	20.4		ug/L		102	85 - 115
Chromium	40.0	38.3		ug/L		96	85 - 115
Cobalt	20.0	21.2		ug/L		106	85 - 115
Copper	40.0	40.6		ug/L		101	85 - 115
Lead	200	191		ug/L		96	85 - 115
Manganese	200	188		ug/L		94	85 - 115
Nickel	40.0	41.2		ug/L		103	85 - 115
Selenium	40.0	37.9		ug/L		95	85 - 115
Silver	20.0	20.8		ug/L		104	85 - 115

TestAmerica Savannah



# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-395745/2-A  
Matrix: Water  
Analysis Batch: 395956

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395745  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	16.0	16.3		ug/L		102	85 - 115
Vanadium	40.0	37.5		ug/L		94	85 - 115
Zinc	40.0	40.0		ug/L		100	85 - 115
Molybdenum	40.0	39.2		ug/L		98	85 - 115

Lab Sample ID: MB 680-395749/1-A  
Matrix: Water  
Analysis Batch: 395962

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 395749

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 10:29	1
Arsenic	0.37	U	1.0	0.37	ug/L		08/12/15 15:12	08/13/15 10:29	1
Barium	0.14	U	2.0	0.14	ug/L		08/12/15 15:12	08/13/15 10:29	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 15:12	08/13/15 10:29	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 15:12	08/13/15 10:29	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 15:12	08/13/15 10:29	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 15:12	08/13/15 10:29	1
Copper	0.50	U	1.0	0.50	ug/L		08/12/15 15:12	08/13/15 10:29	1
Lead	0.060	U	0.30	0.060	ug/L		08/12/15 15:12	08/13/15 10:29	1
Manganese	1.2	U	2.5	1.2	ug/L		08/12/15 15:12	08/13/15 10:29	1
Nickel	0.40	U	1.0	0.40	ug/L		08/12/15 15:12	08/13/15 10:29	1
Selenium	0.698	J	2.0	0.58	ug/L		08/12/15 15:12	08/13/15 10:29	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 15:12	08/13/15 10:29	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 15:12	08/13/15 10:29	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 15:12	08/13/15 10:29	1
Zinc	2.8	U	20	2.8	ug/L		08/12/15 15:12	08/13/15 10:29	1
Molybdenum	0.45	U	1.0	0.45	ug/L		08/12/15 15:12	08/13/15 10:29	1

Lab Sample ID: LCS 680-395749/2-A  
Matrix: Water  
Analysis Batch: 395962

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395749  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	20.0	22.3		ug/L		111	85 - 115
Arsenic	40.0	40.9		ug/L		102	85 - 115
Barium	40.0	40.4		ug/L		101	85 - 115
Beryllium	20.0	20.4		ug/L		102	85 - 115
Cadmium	20.0	20.9		ug/L		104	85 - 115
Chromium	40.0	38.0		ug/L		95	85 - 115
Cobalt	20.0	21.3		ug/L		107	85 - 115
Copper	40.0	40.6		ug/L		101	85 - 115
Lead	200	199		ug/L		100	85 - 115
Manganese	200	189		ug/L		94	85 - 115
Nickel	40.0	41.4		ug/L		104	85 - 115
Selenium	40.0	38.4		ug/L		96	85 - 115
Silver	20.0	21.0		ug/L		105	85 - 115
Thallium	16.0	17.3		ug/L		108	85 - 115
Vanadium	40.0	37.5		ug/L		94	85 - 115
Zinc	40.0	40.3		ug/L		101	85 - 115

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-395749/2-A  
Matrix: Water  
Analysis Batch: 395962

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395749  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Molybdenum	40.0	39.6		ug/L		99	85 - 115

Lab Sample ID: 680-115490-2 MS  
Matrix: Water  
Analysis Batch: 395962

Client Sample ID: GKMTW42\_081115  
Prep Type: Total/NA  
Prep Batch: 395749  
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.40	U	20.0	23.2		ug/L		116	70 - 130
Arsenic	8.5		40.0	50.0		ug/L		104	70 - 130
Barium	35		40.0	73.6		ug/L		97	70 - 130
Beryllium	0.15	U	20.0	21.2		ug/L		106	70 - 130
Cadmium	0.043	U	20.0	20.3		ug/L		101	70 - 130
Chromium	1.0	U	40.0	37.4		ug/L		93	70 - 130
Cobalt	0.12	U	20.0	20.6		ug/L		103	70 - 130
Copper	6.8		40.0	45.7		ug/L		97	70 - 130
Lead	0.22	J	200	195		ug/L		97	70 - 130
Manganese	1.8	J	200	185		ug/L		92	70 - 130
Nickel	0.43	J	40.0	40.1		ug/L		99	70 - 130
Selenium	1.0	J B	40.0	40.1		ug/L		98	70 - 130
Silver	0.10	U	20.0	20.1		ug/L		101	70 - 130
Thallium	0.10	U	16.0	16.8		ug/L		105	70 - 130
Vanadium	8.1		40.0	45.1		ug/L		93	70 - 130
Zinc	3.0	J	40.0	42.7		ug/L		99	70 - 130
Molybdenum	19		40.0	58.6		ug/L		100	70 - 130

Lab Sample ID: 680-115490-2 MSD  
Matrix: Water  
Analysis Batch: 395962

Client Sample ID: GKMTW42\_081115  
Prep Type: Total/NA  
Prep Batch: 395749  
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.40	U	20.0	22.9		ug/L		115	70 - 130	1	20
Arsenic	8.5		40.0	50.3		ug/L		105	70 - 130	1	20
Barium	35		40.0	73.8		ug/L		98	70 - 130	0	20
Beryllium	0.15	U	20.0	20.8		ug/L		104	70 - 130	2	20
Cadmium	0.043	U	20.0	20.1		ug/L		101	70 - 130	1	20
Chromium	1.0	U	40.0	37.1		ug/L		93	70 - 130	1	20
Cobalt	0.12	U	20.0	20.4		ug/L		102	70 - 130	1	20
Copper	6.8		40.0	45.7		ug/L		97	70 - 130	0	20
Lead	0.22	J	200	191		ug/L		95	70 - 130	2	20
Manganese	1.8	J	200	184		ug/L		91	70 - 130	0	20
Nickel	0.43	J	40.0	39.3		ug/L		97	70 - 130	2	20
Selenium	1.0	J B	40.0	41.0		ug/L		100	70 - 130	2	20
Silver	0.10	U	20.0	20.0		ug/L		100	70 - 130	1	20
Thallium	0.10	U	16.0	16.4		ug/L		102	70 - 130	2	20
Vanadium	8.1		40.0	44.9		ug/L		92	70 - 130	0	20
Zinc	3.0	J	40.0	42.5		ug/L		99	70 - 130	0	20
Molybdenum	19		40.0	58.8		ug/L		100	70 - 130	0	20

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-395798/1-A  
Matrix: Water  
Analysis Batch: 395956

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 395798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	U	1.0	0.40	ug/L		08/12/15 17:28	08/13/15 08:48	1
Arsenic	0.37	U	1.0	0.37	ug/L		08/12/15 17:28	08/13/15 08:48	1
Barium	0.14	U	2.0	0.14	ug/L		08/12/15 17:28	08/13/15 08:48	1
Beryllium	0.15	U	0.40	0.15	ug/L		08/12/15 17:28	08/13/15 08:48	1
Cadmium	0.043	U	0.10	0.043	ug/L		08/12/15 17:28	08/13/15 08:48	1
Chromium	1.0	U	2.0	1.0	ug/L		08/12/15 17:28	08/13/15 08:48	1
Cobalt	0.12	U	0.40	0.12	ug/L		08/12/15 17:28	08/13/15 08:48	1
Copper	0.50	U	1.0	0.50	ug/L		08/12/15 17:28	08/13/15 08:48	1
Lead	0.060	U	0.30	0.060	ug/L		08/12/15 17:28	08/13/15 08:48	1
Manganese	1.2	U	2.5	1.2	ug/L		08/12/15 17:28	08/13/15 08:48	1
Nickel	0.40	U	1.0	0.40	ug/L		08/12/15 17:28	08/13/15 08:48	1
Selenium	1.25	J	2.0	0.58	ug/L		08/12/15 17:28	08/13/15 08:48	1
Silver	0.10	U	1.0	0.10	ug/L		08/12/15 17:28	08/13/15 08:48	1
Thallium	0.10	U	0.20	0.10	ug/L		08/12/15 17:28	08/13/15 08:48	1
Vanadium	0.30	U	1.0	0.30	ug/L		08/12/15 17:28	08/13/15 08:48	1
Zinc	2.8	U	20	2.8	ug/L		08/12/15 17:28	08/13/15 08:48	1
Molybdenum	0.45	U	1.0	0.45	ug/L		08/12/15 17:28	08/13/15 08:48	1

Lab Sample ID: LCS 680-395798/2-A  
Matrix: Water  
Analysis Batch: 395956

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395798  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	20.0	22.6		ug/L		113	85 - 115
Arsenic	40.0	42.4		ug/L		106	85 - 115
Barium	40.0	42.2		ug/L		106	85 - 115
Beryllium	20.0	21.1		ug/L		106	85 - 115
Cadmium	20.0	20.1		ug/L		100	85 - 115
Chromium	40.0	40.3		ug/L		101	85 - 115
Cobalt	20.0	22.0		ug/L		110	85 - 115
Copper	40.0	42.5		ug/L		106	85 - 115
Lead	200	193		ug/L		97	85 - 115
Manganese	200	195		ug/L		97	85 - 115
Nickel	40.0	43.0		ug/L		108	85 - 115
Selenium	40.0	41.1		ug/L		103	85 - 115
Silver	20.0	21.6		ug/L		108	85 - 115
Thallium	16.0	16.8		ug/L		105	85 - 115
Vanadium	40.0	39.1		ug/L		98	85 - 115
Zinc	40.0	40.9		ug/L		102	85 - 115
Molybdenum	40.0	41.0		ug/L		103	85 - 115

TestAmerica Savannah

# QC Sample Results

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Method: 2340B-2011 - Total Hardness (as CaCO3) by calculation

Lab Sample ID: MB 680-395950/55  
Matrix: Water  
Analysis Batch: 395950

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	3.3	U	3.3	3.3	mg/L	-		08/13/15 12:13	1

Lab Sample ID: MB 680-395953/1  
Matrix: Water  
Analysis Batch: 395953

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	3.3	U	3.3	3.3	mg/L	-		08/13/15 12:18	1

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-395807/1-A  
Matrix: Water  
Analysis Batch: 395972

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 395807

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L	-	08/12/15 18:16	08/13/15 11:34	1

Lab Sample ID: LCS 680-395807/2-A  
Matrix: Water  
Analysis Batch: 395972

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395807  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	2.50	2.47		ug/L	-	99	85 - 115

Lab Sample ID: MB 680-395813/1-A  
Matrix: Water  
Analysis Batch: 395958

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 395813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	U	0.20	0.080	ug/L	-	08/12/15 18:23	08/13/15 08:35	1

Lab Sample ID: LCS 680-395813/2-A  
Matrix: Water  
Analysis Batch: 395958

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 395813  
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	2.50	2.57		ug/L	-	103	85 - 115

TestAmerica Savannah

# QC Association Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Metals

### Prep Batch: 395745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-3	GKMTW43_081115	Total/NA	Water	200	
680-115490-5	GKMTW45_081115	Total/NA	Water	200	
LCS 680-395745/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395745/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-3	GKMTW43_081115	Total/NA	Water	200	
680-115490-5	GKMTW45_081115	Total/NA	Water	200	
LCS 680-395747/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395747/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	200	
680-115490-2	GKMTW42_081115	Total/NA	Water	200	
680-115490-2 MS	GKMTW42_081115	Total/NA	Water	200	
680-115490-2 MSD	GKMTW42_081115	Total/NA	Water	200	
680-115490-4	GKMTW44_081115	Total/NA	Water	200	
680-115490-7	GKMTW101_081115	Total/NA	Water	200	
680-115490-8	GKMTW102_081115	Total/NA	Water	200	
LCS 680-395749/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395749/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	200	
680-115490-2	GKMTW42_081115	Total/NA	Water	200	
680-115490-2 MS	GKMTW42_081115	Total/NA	Water	200	
680-115490-2 MSD	GKMTW42_081115	Total/NA	Water	200	
680-115490-4	GKMTW44_081115	Total/NA	Water	200	
680-115490-7	GKMTW101_081115	Total/NA	Water	200	
680-115490-8	GKMTW102_081115	Total/NA	Water	200	
LCS 680-395752/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395752/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-6	GKMTW100_081115	Total/NA	Water	200	
LCS 680-395798/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395798/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-6	GKMTW100_081115	Total/NA	Water	200	
LCS 680-395800/2-A	Lab Control Sample	Total/NA	Water	200	
MB 680-395800/1-A	Method Blank	Total/NA	Water	200	

### Prep Batch: 395807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-3	GKMTW43_081115	Total/NA	Water	245.1	

TestAmerica Savannah

# QC Association Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Metals (Continued)

### Prep Batch: 395807 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-5	GKMTW45_081115	Total/NA	Water	245.1	
LCS 680-395807/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-395807/1-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 395813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	245.1	
680-115490-2	GKMTW42_081115	Total/NA	Water	245.1	
680-115490-4	GKMTW44_081115	Total/NA	Water	245.1	
680-115490-6	GKMTW100_081115	Total/NA	Water	245.1	
680-115490-7	GKMTW101_081115	Total/NA	Water	245.1	
680-115490-8	GKMTW102_081115	Total/NA	Water	245.1	
LCS 680-395813/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 680-395813/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 395943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2 MS	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2 MS	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2 MSD	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-2 MSD	GKMTW42_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-3	GKMTW43_081115	Total/NA	Water	200.7 Rev 4.4	395747
680-115490-3	GKMTW43_081115	Total/NA	Water	200.7 Rev 4.4	395747
680-115490-4	GKMTW44_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-4	GKMTW44_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-5	GKMTW45_081115	Total/NA	Water	200.7 Rev 4.4	395747
680-115490-6	GKMTW100_081115	Total/NA	Water	200.7 Rev 4.4	395800
680-115490-6	GKMTW100_081115	Total/NA	Water	200.7 Rev 4.4	395800
680-115490-7	GKMTW101_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-7	GKMTW101_081115	Total/NA	Water	200.7 Rev 4.4	395752
680-115490-8	GKMTW102_081115	Total/NA	Water	200.7 Rev 4.4	395752
LCS 680-395747/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	395747
LCS 680-395752/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	395752
LCS 680-395800/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	395800
MB 680-395747/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	395747
MB 680-395752/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	395752
MB 680-395800/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	395800

### Analysis Batch: 395950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-6	GKMTW100_081115	Total/NA	Water	2340B-2011	
MB 680-395950/55	Method Blank	Total/NA	Water	2340B-2011	

### Analysis Batch: 395953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	2340B-2011	
680-115490-2	GKMTW42_081115	Total/NA	Water	2340B-2011	
680-115490-3	GKMTW43_081115	Total/NA	Water	2340B-2011	

TestAmerica Savannah

# QC Association Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

## Metals (Continued)

### Analysis Batch: 395953 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-4	GKMTW44_081115	Total/NA	Water	2340B-2011	
680-115490-5	GKMTW45_081115	Total/NA	Water	2340B-2011	
680-115490-7	GKMTW101_081115	Total/NA	Water	2340B-2011	
680-115490-8	GKMTW102_081115	Total/NA	Water	2340B-2011	
MB 680-395953/1	Method Blank	Total/NA	Water	2340B-2011	

### Analysis Batch: 395956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-3	GKMTW43_081115	Total/NA	Water	200.8	395745
680-115490-5	GKMTW45_081115	Total/NA	Water	200.8	395745
680-115490-6	GKMTW100_081115	Total/NA	Water	200.8	395798
LCS 680-395745/2-A	Lab Control Sample	Total/NA	Water	200.8	395745
LCS 680-395798/2-A	Lab Control Sample	Total/NA	Water	200.8	395798
MB 680-395745/1-A	Method Blank	Total/NA	Water	200.8	395745
MB 680-395798/1-A	Method Blank	Total/NA	Water	200.8	395798

### Analysis Batch: 395958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	245.1	395813
680-115490-2	GKMTW42_081115	Total/NA	Water	245.1	395813
680-115490-4	GKMTW44_081115	Total/NA	Water	245.1	395813
680-115490-6	GKMTW100_081115	Total/NA	Water	245.1	395813
680-115490-7	GKMTW101_081115	Total/NA	Water	245.1	395813
680-115490-8	GKMTW102_081115	Total/NA	Water	245.1	395813
LCS 680-395813/2-A	Lab Control Sample	Total/NA	Water	245.1	395813
MB 680-395813/1-A	Method Blank	Total/NA	Water	245.1	395813

### Analysis Batch: 395962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-1	GKMTW41_081115	Total/NA	Water	200.8	395749
680-115490-2	GKMTW42_081115	Total/NA	Water	200.8	395749
680-115490-2 MS	GKMTW42_081115	Total/NA	Water	200.8	395749
680-115490-2 MSD	GKMTW42_081115	Total/NA	Water	200.8	395749
680-115490-4	GKMTW44_081115	Total/NA	Water	200.8	395749
680-115490-7	GKMTW101_081115	Total/NA	Water	200.8	395749
680-115490-8	GKMTW102_081115	Total/NA	Water	200.8	395749
LCS 680-395749/2-A	Lab Control Sample	Total/NA	Water	200.8	395749
MB 680-395749/1-A	Method Blank	Total/NA	Water	200.8	395749

### Analysis Batch: 395972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-115490-3	GKMTW43_081115	Total/NA	Water	245.1	395807
680-115490-5	GKMTW45_081115	Total/NA	Water	245.1	395807
LCS 680-395807/2-A	Lab Control Sample	Total/NA	Water	245.1	395807
MB 680-395807/1-A	Method Blank	Total/NA	Water	245.1	395807

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Client Sample ID: GKMTW41\_081115**

**Lab Sample ID: 680-115490-1**

Date Collected: 08/11/15 09:40

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4 Instrument ID: ICPF		1	50 mL	50 mL	395943	08/13/15 09:31	BCB	TAL SAV
Total/NA	Prep	200			50 mL	50 mL	395749	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.8 Instrument ID: ICPMSC		1	50 mL	50 mL	395962	08/13/15 12:38	BWR	TAL SAV
Total/NA	Analysis	2340B-2011 Instrument ID: ICPF		1			395953	08/13/15 12:18	BCB	TAL SAV
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1 Instrument ID: LEEMAN2		1	50 mL	50 mL	395958	08/13/15 09:19	BCB	TAL SAV

**Client Sample ID: GKMTW42\_081115**

**Lab Sample ID: 680-115490-2**

Date Collected: 08/11/15 10:45

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4 Instrument ID: ICPF		1	50 mL	50 mL	395943	08/13/15 08:46	BCB	TAL SAV
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4 Instrument ID: ICPF		10	50 mL	50 mL	395943	08/13/15 11:06	BCB	TAL SAV
Total/NA	Prep	200			50 mL	50 mL	395749	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.8 Instrument ID: ICPMSC		1	50 mL	50 mL	395962	08/13/15 10:58	BWR	TAL SAV
Total/NA	Analysis	2340B-2011 Instrument ID: ICPF		1			395953	08/13/15 12:18	BCB	TAL SAV
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1 Instrument ID: LEEMAN2		1	50 mL	50 mL	395958	08/13/15 09:00	BCB	TAL SAV

**Client Sample ID: GKMTW43\_081115**

**Lab Sample ID: 680-115490-3**

Date Collected: 08/11/15 11:35

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395747	08/12/15 15:04	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4 Instrument ID: ICPF		1	50 mL	50 mL	395943	08/13/15 05:50	BCB	TAL SAV
Total/NA	Prep	200			50 mL	50 mL	395747	08/12/15 15:04	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4 Instrument ID: ICPF		10	50 mL	50 mL	395943	08/13/15 10:43	BCB	TAL SAV
Total/NA	Prep	200			50 mL	50 mL	395745	08/12/15 15:04	BJB	TAL SAV

TestAmerica Savannah



# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Client Sample ID: GKMTW43\_081115**

**Lab Sample ID: 680-115490-3**

**Date Collected: 08/11/15 11:35**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	200.8		1	50 mL	50 mL	395956	08/13/15 02:29	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395953	08/13/15 12:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395807	08/12/15 18:16	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395972	08/13/15 13:00	BCB	TAL SAV
		Instrument ID: LEEMAN2								

**Client Sample ID: GKMTW44\_081115**

**Lab Sample ID: 680-115490-4**

**Date Collected: 08/11/15 12:30**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	395943	08/13/15 09:22	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		10	50 mL	50 mL	395943	08/13/15 11:29	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395749	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.8		1	50 mL	50 mL	395962	08/13/15 11:29	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395953	08/13/15 12:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395958	08/13/15 09:13	BCB	TAL SAV
		Instrument ID: LEEMAN2								

**Client Sample ID: GKMTW45\_081115**

**Lab Sample ID: 680-115490-5**

**Date Collected: 08/11/15 12:40**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395747	08/12/15 15:04	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	395943	08/13/15 05:55	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395745	08/12/15 15:04	BJB	TAL SAV
Total/NA	Analysis	200.8		1	50 mL	50 mL	395956	08/13/15 02:32	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395953	08/13/15 12:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395807	08/12/15 18:16	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395972	08/13/15 13:03	BCB	TAL SAV
		Instrument ID: LEEMAN2								

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Client Sample ID: GKMTW100\_081115**

**Lab Sample ID: 680-115490-6**

Date Collected: 08/11/15 09:15

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395800	08/12/15 17:44	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	395943	08/13/15 08:28	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395800	08/12/15 17:44	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		10	50 mL	50 mL	395943	08/13/15 10:54	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395798	08/12/15 17:45	BJB	TAL SAV
Total/NA	Analysis	200.8		1	50 mL	50 mL	395956	08/13/15 10:09	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395950	08/13/15 12:13	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395958	08/13/15 09:41	BCB	TAL SAV
		Instrument ID: LEEMAN2								

**Client Sample ID: GKMTW101\_081115**

**Lab Sample ID: 680-115490-7**

Date Collected: 08/11/15 09:55

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	395943	08/13/15 09:00	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		10	50 mL	50 mL	395943	08/13/15 11:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395749	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.8		1	50 mL	50 mL	395962	08/13/15 11:25	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395953	08/13/15 12:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395958	08/13/15 09:03	BCB	TAL SAV
		Instrument ID: LEEMAN2								

**Client Sample ID: GKMTW102\_081115**

**Lab Sample ID: 680-115490-8**

Date Collected: 08/11/15 11:05

Matrix: Water

Date Received: 08/12/15 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200			50 mL	50 mL	395752	08/12/15 15:12	BJB	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	395943	08/13/15 09:27	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	200			50 mL	50 mL	395749	08/12/15 15:12	BJB	TAL SAV

TestAmerica Savannah

# Lab Chronicle

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

**Client Sample ID: GKMTW102\_081115**

**Lab Sample ID: 680-115490-8**

**Date Collected: 08/11/15 11:05**

**Matrix: Water**

**Date Received: 08/12/15 09:46**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	200.8		1	50 mL	50 mL	395962	08/13/15 12:33	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Analysis	2340B-2011		1			395953	08/13/15 12:18	BCB	TAL SAV
		Instrument ID: ICPF								
Total/NA	Prep	245.1			50 mL	50 mL	395813	08/12/15 18:23	CRW	TAL SAV
Total/NA	Analysis	245.1		1	50 mL	50 mL	395958	08/13/15 09:16	BCB	TAL SAV
		Instrument ID: LEEMAN2								

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah



## Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 680-115490-1

Login Number: 115490

List Number: 1

Creator: Daughtry, Beth A

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Certification Summary

Client: Weston Solutions, Inc.  
Project/Site: Gold King Mine - Region 8

TestAmerica Job ID: 680-115490-1

---

### Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

---

Authority	Program	EPA Region	Certification ID	Expiration Date
Colorado	State Program	8	N/A	12-31-15
New Mexico	State Program	6	N/A	06-30-16

TestAmerica Savannah